

Title (en)
CONTINUOUS ULTRASONIC TREATMENT OF SEEDS

Title (de)
KONTINUIERLICHE ULTRASCHALLBEHANDLUNG VON SAMEN

Title (fr)
TRAITEMENT DE GRAINES EN CONTINU PAR ULTRASONS

Publication
EP 3253191 A1 20171213 (EN)

Application
EP 16747142 A 20160202

Priority
• US 201562125836 P 20150202
• US 2016016232 W 20160202

Abstract (en)
[origin: WO2016126745A1] A process and an apparatus continuously treat seeds with ultrasonic transmission. The process includes mixing seeds with a flowable medium to create a flowable slurry of seeds; continuously moving the flowable slurry of seeds for a length of a flow pipe through a helical path within the flow pipe; and as the flowable slurry flows through the helical path within the for the length of the flow pipe, subjecting the seeds to ultrasonic transmission created by ultrasonic transducers arranged along the length of the flow pipe. The seeds in the flowable slurry are subjected to the ultrasonic transmission having such waveforms and being transmitted in a manner so as not to damage the seeds and to produce ultrasonically-treated seeds that have regulated germination characteristics, such that plants resulting from the ultrasonically-treated seeds when the seeds are planted have affected growth characteristics. The apparatus effects this process.

IPC 8 full level
A01C 1/02 (2006.01); **B01J 19/10** (2006.01); **C02F 1/36** (2006.01)

CPC (source: EP US)
A01C 1/00 (2013.01 - EP US); **A01C 1/02** (2013.01 - US); **B01J 19/10** (2013.01 - US); **C02F 1/36** (2013.01 - US)

Citation (search report)
See references of WO 2016126745A1

Designated contracting state (EPC)
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Designated extension state (EPC)
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WO 2016126745 A1 20160811; BR 112017016242 A2 20180327; CN 107426959 A 20171201; EP 3253191 A1 20171213; HK 1247783 A1 20181005; US 2018000004 A1 20180104

DOCDB simple family (application)
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